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10/594,792	09/29/2006	Holger Ratz	W1.2315 PCT-US	6721

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EXAMINER

DESAI, HEMANT

ART UNIT	PAPER NUMBER
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3721

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,792	Applicant(s) RATZ, HOLGER	
	Examiner Hemant M. Desai	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-32 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by German reference (1211212).

German reference discloses a product folding apparatus comprising a transport track (10) adapted to transport a product (12) and having a transport track drive mechanism (since the transport device is transporting the product-12, drive-motor is inherent), a longitudinal folding apparatus (34) connected to the transport track to receive the product from the transport track and to fold the product longitudinally in the product transport direction, a vertically reciprocating folding blade (34) in the longitudinal folding apparatus, a folding table (inherent part of the invention) supporting the folding blade, a folding blade drive motor (30) usable to raise and lower the folding blade with respect to the folding table through a folding blade drive mechanism and the folding blade drive motor being controlled independently of the transport track drive mechanism, a folding blade drive motor control device (46, 18), and an optical product sensor (12) arranged adjacent the folding blade and before the folding blade in the product transport direction, the product sensor controlling the folding blade drive motor (see fig. 1, see paragraph 0009, 0020, 0022, 0023 and 0023 of the translation), which meets all the claimed limitations. Note that “said optical product sensor.... direction.”

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(claim 1, lines 19-27), is functional recitation that has not been given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 U.S.C. 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. In re Fuller, 1929 C.D. 172; 388 O.G. 279.

Regarding claim 23, German reference discloses a folding blade support lever (32, fig. 1) pivotably attached to the folding table.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24-29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over German reference in view of Fischer et al. (4269402).

The German reference ('212), as mentioned above, discloses all the claimed limitations, except for a slow down buffer. Fischer et al. teach a longitudinal folding machine having vertically reciprocating blade (4, fig. 1) to provide longitudinal fold in the printed product. Fischer et al. teach a slow down buffer (strand 8, fig.1) running a reduce speed to slow down the printed product before it hits the stop (6, fig. 1) to prevent damage to the products, danger of recoiling and to guarantee a mode of operation more gentle and protective with simultaneous high production accuracy (see

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col. 2, lines 2-7). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the slow down moving buffer (endless belt) as taught by Fischer et al. in the product folding apparatus of German Patent ('212) to slow down the printed product before it hits the stop to prevent damage to the products, danger of recoiling and to guarantee a mode of operation more gentle and protective with simultaneous high production accuracy.

Regarding claim 34, the modified German reference discloses the product sensor is usable to synchronize the movement of the buffer using the product phase relationship.

5. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over German reference (1211212) in view of German reference (19802995).

The modified German reference ('212), as mentioned above, discloses all the claimed limitations, except for a shunt arranged to selectively supply products. However, German Patent ('995) discloses that it is well known in the art to provide a shunt (5, 28, see fig. 1) to selectively supply products (10) for further processing. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the shunt as taught by German Patent ('995) in the product folding apparatus of German Patent ('212) to selectively supply products for further processing.

Regarding claims 31-32 the German Patent ('995) teaches that a shunt drives mechanism (6, fig. 2) and a shunt drive mechanism control device (24, fig. 2) and

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further including a shunt sensor (19) located before the shunt and usable to actuate the shunt drive mechanism control device.

To the extent that, applicant does not agree with the above rejection, claims are alternatively rejected as follows:

6. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over German reference (1211212) in view of Bruno (4514963).

German reference, as mentioned above, discloses all the claimed limitations. German reference also discloses the sensor to detect the product and control the drive mechanism of the folding blade to synchronize the vertical reciprocation to fold the product longitudinally in a correct manner each time. German reference, does not teach that the sensor uses the product phase relation of the product to synchronize the vertical reciprocation of the folding blade at folding time. However, Bruno discloses that it is known in the art to provide a sensor (16, figs. 5A-5E) and controller (13) to determine the product phase relation of the product (2, figs. 5A-5E) to synchronize the speed of the conveyor in proportion to the degree of deviation (see col. 3, lines 59). The substitution of one known element (using a sensor to determine the product phase relation of the product to synchronization as shown in Bruno) for another (synchronization by speed of the German reference) would have been obvious to one of ordinary skill in the art at the time of the invention since the substitution of the sensor to determine the product phase relation of the product to synchronize as shown in Collins would have yielded predictable results, namely, synchronization of the vertical

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reciprocation of the folding blade to the degree of deviation in German reference to longitudinally fold the product in a correct manner each time.

7. Claims 24-29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over German reference and Bruno as applied to claim 22 above, and further in view of Fischer et al. (4269402).

The modified German reference ('212), as mentioned above, discloses all the claimed limitations, except for a slow down buffer. Fischer et al. teach a longitudinal folding machine having vertically reciprocating blade (4, fig. 1) to provide longitudinal fold in the printed product. Fischer et al. teach a slow down buffer (strand 8, fig.1) running a reduce speed to slow down the printed product before it hits the stop (6, fig. 1) to prevent damage to the products, danger of recoiling and to guarantee a mode of operation more gentle and protective with simultaneous high production accuracy (see col. 2, lines 2-7). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the slow down moving buffer (endless belt) as taught by Fischer et al. in the product folding apparatus of German Patent ('212) to slow down the printed product before it hits the stop to prevent damage to the products, danger of recoiling and to guarantee a mode of operation more gentle and protective with simultaneous high production accuracy.

Regarding claim 34, the modified German reference discloses the product sensor is usable to synchronize the movement of the buffer using the product phase relationship.

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8. Claims 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over German reference (1211212) and Bruno as applied to claim 22 above, and further in view of German reference (19802995).

The modified German reference ('212), as mentioned above, discloses all the claimed limitations, except for a shunt arranged to selectively supply products.

However, German Patent ('995) discloses that it is well known in the art to provide a shunt (5, 28, see fig. 1) to selectively supply products (10) for further processing.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the shunt as taught by German Patent ('995) in the product folding apparatus of German Patent ('212) to selectively supply products for further processing.

Regarding claims 31-32 the German Patent ('995) teaches that a shunt drives mechanism (6, fig. 2) and a shunt drive mechanism control device (24, fig. 2) and further including a shunt sensor (19) located before the shunt and usable to actuate the shunt drive mechanism control device.

Response to Arguments

9. Applicant's arguments with respect to claims 22-32 and 34 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemant M. Desai whose telephone number is (571) 272-4458. The examiner can normally be reached on 6:30 AM-5:00 PM, Mon-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hemant M Desai/
Primary Examiner, Art Unit 3721